



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,815	01/24/2006	Gerrit Frederik Magdalena De Poortere	NL 030906	7565
24737	7590	12/27/2007	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			MONIKANG, GEORGE C	
P.O. BOX 3001			ART UNIT	PAPER NUMBER
BRIARCLIFF MANOR, NY 10510			2615	
			MAIL DATE	DELIVERY MODE
			12/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/565,815	DE POORTERE, GERRIT FREDERIK MAGDALENA
	Examiner	Art Unit
	George C. Monikang	2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 24 January 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-10 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-10 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 10/565,815.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date <u>8/15/2007</u> .	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims Claims1-2, 4, 6 & 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Zwicker et al, US Patent 4,868,881. (Zwicker et al is cited in IDS filed 8/15/2007).
3. Re Claim 1, Zwicker et al discloses an audio conditioning apparatus for conditioning an audio signal to be output (*abstract*), comprising: a noise characterizing unit arranged to evaluate a noise level of environmental noise (*fig. 1: 4; abstract*); and a volume amplification unit arranged to amplify a volume of the audio signal by a volume gain, depending on the noise level (*fig. 1: 2; abstract*), characterized in that a further noise characterizing unit is comprised, arranged to evaluate a further noise of the environmental noise in a bass frequency noise band or a treble frequency noise band (*fig. 1: 5; abstract; col. 4, lines 10-20*), and a further amplification unit is comprised, arranged to amplify by a further gain the amplitude of frequency components in a bass frequency audio band respectively a treble frequency audio band of the audio signal, in dependence of the further noise level (*fig. 1: 3; abstract; col. 4, lines 10-20*); but fails to disclose the loudspeaker being a headphone.

Re Claim 2, Zwicker et al discloses an audio conditioning apparatus according to claim 1, wherein an upper limit of the bass frequency audio band substantially lies in the range of 60 to 150 Hz, and wherein a lower limit of the treble frequency audio band substantially lies in the range of 8 kHz to 12 kHz (col. 4, lines 10-20).

Re Claim 4, Zwicker et al discloses an audio conditioning apparatus according to claim 1, wherein gain dispatcher unit is comprised, arranged to allocate a maximum allowable gain, on the basis of available headroom for amplification (col. 1, lines 54-61).

Re Claim 8, Zwicker et al discloses an audio reproduction apparatus, comprising: a loudspeaker for reproduction of the audio signal (fig. 1: 6 & 7); an access to an input audio signal on which the audio signal is based (abstract); and an audio conditioning apparatus (abstract) as claimed in claim 1.

Claims 9 & 10 have been analyzed and rejected according to claim 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zwicker et al, US Patent 4,868,881. (Zwicker et al is cited in IDS filed 8/15/2007).

Re Claim 6, Zwicker et al discloses an audio conditioning apparatus according to claim 1 connectable to a loudspeaker usable for reproduction of the audio signal (*fig. 1: 6 & 7*), wherein an active noise canceling unit is comprised arranged to substantially cancel environmental noise in a cancellation band of frequencies, the noise being measurable by a microphone (*abstract*).

Zwicker et al fails to disclose the loudspeaker being a headphone. Official notice is taken that both the concepts and advantages of providing headphone loudspeakers are well known in the art. It would have been obvious to use headphones since they are commonly used as portable speakers.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zwicker et al, US Patent 4,868,881 as applied to claim 1 above, and further in view of Kuusama, US Patent 5,509,081. (Kuusama is cited in IDS filed 8/15/2007)

Re Claim 3, Zwicker et al discloses an audio conditioning apparatus according to claim 1, but fails to disclose wherein a gain consistency unit is comprised arranged to

yield a gain consistently varying in time, according to a predetermined mathematical criterion. However, Kuusama does (*col. 3, lines 17-38*).

Taking the combined teachings of Zwicker et al and Kuusama as a whole, one skilled in the art would have found it obvious to modify the audio conditioning apparatus according to Zwicker et al with wherein a gain consistency unit is comprised arranged to yield a gain consistently varying in time, according to a predetermined mathematical criterion as taught in Kuusama (*col. 3, lines 17-38*) to provide different time constants for the gain.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zwicker et al, US Patent 4,868,881 as applied to claim 1 above, and further in view of Bohn, US Patent 5,046,105. (Bohn is cited in IDS filed 8/15/2007)

9. Re Claim 5, Zwicker et al discloses an audio conditioning apparatus according to claim 1, but fails to disclose wherein the further amplification unit comprises a shelving filter. However, Bohn does (*col. 8, lines 56-60*).

10. Taking the combined teachings of Zwicker et al and Bohn as a whole, one skilled in the art would have found it obvious to modify the audio conditioning apparatus according to Zwicker et al with wherein the further amplification unit comprises a shelving filter as taught in Bohn (*col. 8, lines 56-60*) to cause the amplitude versus frequency response characteristics of the audio signal to exhibit the shape of a shelf.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zwicker et al, US Patent 4,868,881 as applied to claim 6 above, and further in view of Philipsson et al, US Patent 7,006,624 B1.

Re Claim 7, Zwicker et al discloses an audio conditioning apparatus according to claim 6, but fails to disclose wherein a distance measuring device is comprised arranged to measure a distance between the microphone and the loudspeaker. However, Philipsson et al does (*col. 4, lines 32-41*).

Taking the combined teachings of Zwicker et al and Philipsson et al as a whole, one skilled in the art would have found it obvious to modify the audio conditioning apparatus according to Zwicker et al with wherein a distance measuring device is comprised arranged to measure a distance between the microphone and the loudspeaker as taught in Philipsson et al (*col. 4, lines 32-41*) to be able to control the gain.

Zwicker et al and Philipsson et al fail to disclose the loudspeaker being a headphone. Official notice is taken that both the concepts and advantages of providing headphone loudspeakers are well known in the art. It would have been obvious to use headphones since they are commonly used as portable speakers

Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George C. Monikang whose telephone number is 571-

270-1190. The examiner can normally be reached on M-F. alt Fri. Off 7:30am-5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

George Monikang

12/9/2007



VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600